

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,660,378 B2  
APPLICATION NO. : 10/531674  
DATED : February 9, 2010  
INVENTOR(S) : Jean-Marc Brossier et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Abstract section on Title Page of patent from

“A method for estimating the phase in a digital communication system, compromising the steps of:

receiving and storing a block of observations  $Y_{\text{subk}}$ ;  
executing at least one phase locked loop (PLL) on a  
predetermined sequence of observations extracted from  
said block.

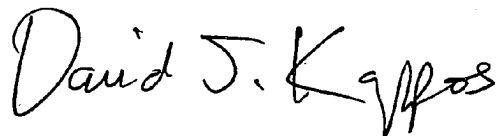
Each PLL provides an intermediate value, combining both intermediate values makes it possible to provide a sharpened phase estimate. The method allows realization of an improved phase estimator based on the simplicity of phase locked loops.”

-- To --

“A method for estimating the phase in a digital communication system, compromising the steps of: receiving and storing a block of observations  $Y_{\text{subk}}$ ; executing at least one phase locked loop (PLL) on a pre-determined sequence of observations extracted from said block. Each PLL provides an intermediate value, combining both intermediate values makes it possible to provide a sharpened phase estimate. The method allows realization of an improved phase estimator based on the simplicity of phase locked loops.”

Signed and Sealed this

Thirteenth Day of April, 2010

A handwritten signature in black ink, reading "David J. Kappos". The signature is written in a cursive, flowing style with a large initial 'D' and 'K'.

David J. Kappos  
*Director of the United States Patent and Trademark Office*